## UNITED STATES PATENT AND TRADEMARK OFFICE CERTIFICATE OF CORRECTION

PATENT NO. : 7,170,511 B2 Page 1 of 2

APPLICATION NO.: 09/759597

DATED: January 30, 2007

INVENTOR(S): Sowizral et al.

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 26 Lines 1 - 19, please delete "A method for managing a virtual world, the method comprising: creating a scene graph; adding one or more pointers to the scene graph, wherein the pointers point to objects that are part of the virtual world; generating a parallel means of accessing the one or more objects in the scene graph by: determining whether a data structure corresponding to the one or more objects already exist, and, if the corresponding data structure does not already exist, creating a new data structure corresponding to the type of object; creating a new entry in the corresponding data structure; creating one or more threads to act on the data structures; and executing the threads to render an image corresponding to the scene graph." and substitute -- A computer implemented method, the method comprising: creating a scene graph for a virtual world; adding one or more pointers to the scene graph, wherein the pointers point to one or more objects that are included in the virtual world; generating a parallel representation of the scene graph by: determining whether a data structure already exists for a type of object that corresponds to each of the one or more objects; and if the corresponding data structure type does not already exist, creating a new data structure corresponding to the type of object; or if the corresponding data structure type does already exist, creating a new entry in the corresponding data structure; creating one or more threads configured to process each data structure; and executing at least a subset of the threads to render an image corresponding to the scene graph. --:

Column 26 Line 45, please delete "The method oft claim 12," and substitute -- The method of claim 12, --;

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It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 26 Lines 51-55, please delete "The method of claim 12, wherein said adding one or more objects to a hierarchy by defining parent-child relationships for the one or more objects comprises inserting a pointer to a data file corresponding to the object into the hierarchy." and substitute -- The method of claim 12, further comprising creating a hierarchy for the scene graph by defining parent-child relationships for the one or more objects, wherein said defining comprises inserting a pointer to a data file corresponding to each object into the hierarchy. --.

Signed and Sealed this

Eleventh Day of September, 2007

JON W. DUDAS Director of the United States Patent and Trademark Office